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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,204	03/22/2004	Yutaka Adegawa	Q80610	1126

23373 7590 02/06/2006

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EXAMINER

TRUONG, DUC

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/805,204

**Applicant(s)**

ADEGAWA, YUTAKA

**Examiner**

Duc Truong

**Art Unit**

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 2 and 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5 and 7-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

In response to the restriction requirement dated June 29, 2005, Applicants elect to prosecute formula (Y-1) for each of Y1 and Y2, and the fifth compound in the first row of the compounds listed in claim 3 for each of [Ar1] and [Ar2], without traverse in that claims 1,2,4,5,6 and 8-10 are read on the elected species.

In the response to the last Office action, Applicants is correct in stating that the references do not disclose the claimed formula (Y-1). Therefore, the search is further expanded to non-elected species such as (Y-3) in that claims 1,3,4-5, and 7-10 are read on the elected species.

Claims 1,3-5, and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lau '421 or '733, both of record on 1449.

The references disclose poly(arylene ether) compositions that form low dielectric constant, low moisture absorbing and high glass transition temperature dielectric films (see col. 1, scope of the invention).

The references further disclose repeating units of the structure in Formula I (see col. 2, line 55 et seq. of '421; col. 3, line 5 et seq. of '733) in that if Y1 of '421 or Y of '733 is the first structure at col. 3 of '421 or '733; Ar1 is the first structure at col. 6 of '421 or the third structure from the bottom of col. 5, and m in the claimed structure is =0, then the repeating units of the references is read on that of the instant claims.

On the other hand, since Y1=Y2 and Ar1=Ar2, then the repeating structure with n unit and the repeating structure with m unit are identical, to form  $-[O-Y1-O-Ar1]-m+n$  in that  $m+n=100\%$  of the repeating unit.

The disclosures of the references differ from the instant claims in that they neither disclose the upper two benzene rings in the repeating unit (Y-3) are substituted by the aromatic ring containing monovalent hydrocarbon groups Rar1 and Rar2 nor the claimed characteristics such as "decomposes under heat at 250 C to 450 C or through UV irradiation or through electron beam irradiation to generate gas, as in claim 8.

However, the references do disclose similar reactants in that the hydrocarbon groups Rar1 and Rar2 do not effect the mechanism to form the same or similar products. Therefore, it would have been obvious to one of ordinary skill in the art to select Y-3 from the references within the limitation of the instant claims, to omit Rar1 and Rar2 from Y-3 and its function and employed the composition as claimed since the omission of an element and loss of its function from a combination is obvious in the absence of a showing of unexpected result following from such omission. See *In re Wilson*, 153 USPQ 740 (CCPA 1967), *Ex parte Rainu*, 168 USPQ 375.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Truong whose telephone number is 571-272-1081. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read 'Ductruong', with a stylized flourish at the end.

DUCTRUONG  
PRIMARY EXAMINER